

ACIS – Arizona Crash Information System Training Video 2 Interactive Crash Dashboards



ADOT Traffic Safety Group

Created on February 4, 2021

ARIZONA DEPARTMENT OF TRANSPORTATION



The dashboard links are located on the ACIS page under the Interactive Crash Data tab





Interactive Crash Dashboards

Crash Data by Agency - Charts and Graphs

Crash Count Overview - Incident and Person Counts

County Crash Data by ACIS Flag



Crash Counts for Agencies



Crash Analysis for Agencies

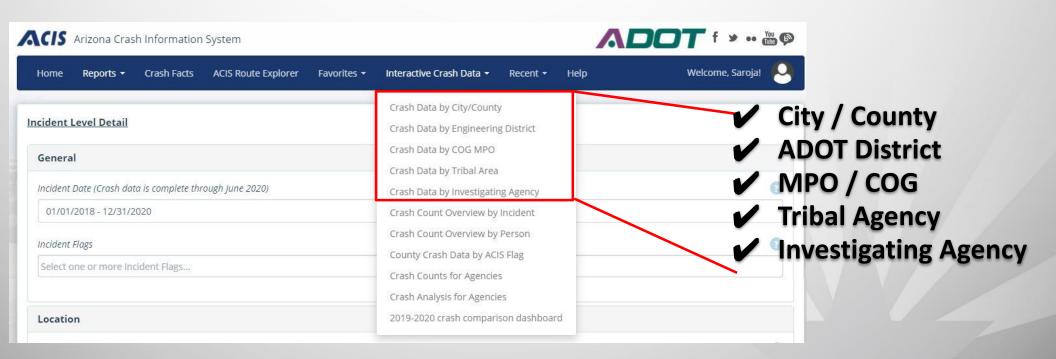






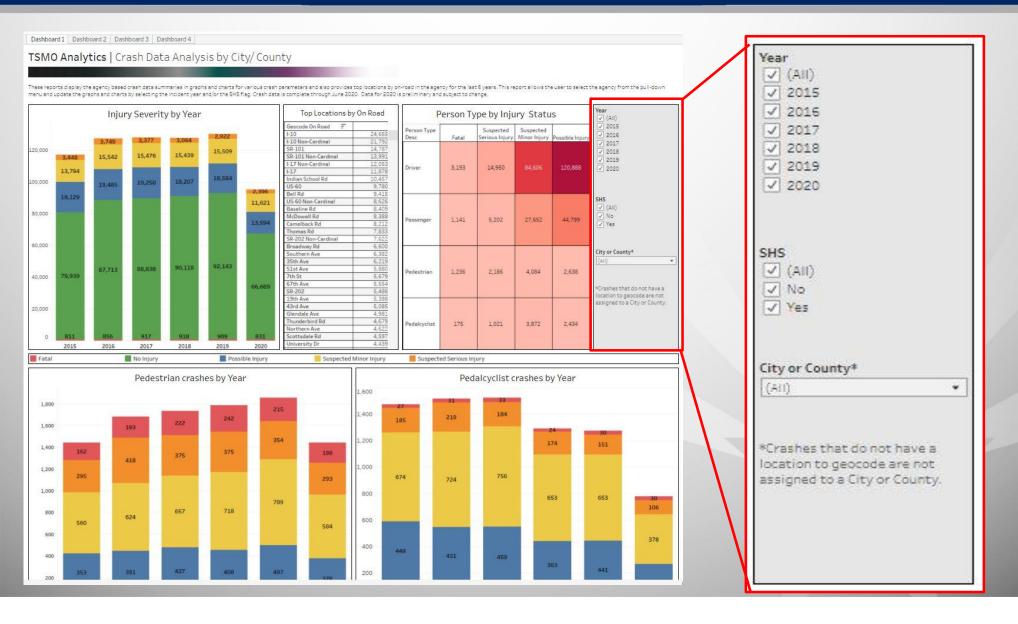
Crash Data by Agency

Separate Dashboard for each Agency category listed below





Crash Data by Agency



Crash Data by Agency

Dashboard 1 Dashboard 2 Dashboard 3 Dashboard 4

TSMO Analytics | Crash Data Analysis by City/ County

These reports display the agency based crash data summaries in graphs and charts for various crash parameters and also provides top locations by on-road in the agency for the last 6 years. This report allows the user to select the agency from the pull-down menu and update the graphs and charts by selecting the incident year and/or the SHS flag. Crash data is complete through June 2020. Data for 2020 is preliminary and subject to change.

Dashboard 1	Dashboard 2	Dashboard 3	Dashboard 4
Injury Severity by Year	Crash Type by Severity	Physical Condition for Drivers, Pedestrians and Pedalcyclists	Injury Severity by month
Top Locations by On Road	First Harmful Event for Single Vehicle Crashes	Safety Device for drivers and passengers (fatal injury only)	Crash Type by Injury Severity (incident count)
Person Type by Injury Status	Collision Manner by Direction of Travel (Drivers, Pedestrian, and Pedal cyclists)	Traffic Control Device for Drivers	Secondary Crashes by Year
Pedestrian Crashes by Year	Direction of Travel for Unit 1 (Drivers, Pedestrians, and Pedal cyclists)	Violations for Drivers	Injury Severity by Day
Pedalcyclist Crashes by Year	Crashes by Weather Conditions	Gender of Drivers (all Crashes)	Injury Severity by Hour
Older Driver (Age 65 and up) involved Crashes by Year	Road Surface Condition for Drivers by Severity	Gender of Drivers that had a Fatal Injury	
Younger Driver (age 14-24) involved crashes by year		Driver Age Group (all Crashes)	
		Drivers by Age group that had a Fatal Injury	
		Unit Action for drivers, pedestrians and pedalcyclists	



Crash Count Overview

Separate Dashboard for Incident Count and Person Count



Crash Count Overview by Incident

Crash Count Overview by Person



Crash Count Overview

The dashboards have graphs for each of the below categories for the INCIDENT and PERSON count dashboards

- Total Crashes
- Motorcycle
- Pedestrian (STSP EA)
- Bicycle
- Animal Involved Crash
- Distracted Driving (STSP EA)
- Speed Related (STSP EA)
- Impairment (STSP EA)
- Safety Device not used or unknown (STSP EA) - (Incident only)
- Lane Departure (STSP EA)
- Cross Median (Multi-Vehicle)

- Wrong Way
- Secondary Crashes
- Younger Driver Involved
- Older Driver Involved
- School Bus
- Heavy Vehicle
- Wet Surface Crashes (person only)
- Work Zone
- Urban
- Rural
- Safety Device not used (person only)

Separate Dashboard for each Agency category listed below

- City / County
- ✓ ADOT District
- ✓ MPO / COG
- ✓ Tribal Agency
- ✓ Investigating Agency

By City/ County

By Engineering District

By COG/ MPO

By Tribal Area

By Investigating Agency

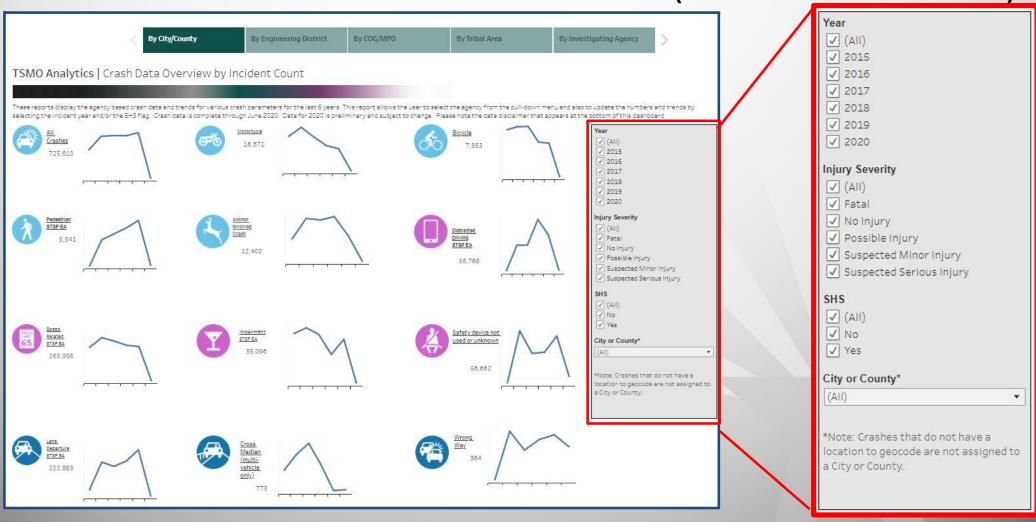
TSMO Analytics | Crash Data Overview by Person Count

These reports display the agency based crash data and trends for various crash parameters for the last 6 years. This report allows the user to select the agency from the pull-down menu and also to update the numbers and trends by selecting the incident year and/or the SHS flag. Crash data is complete through June 2020. Data for 2020 is preliminary and subject to change. Please note the data disclaimer that appears at the bottom of this dashboard.



Crash - Incident Count

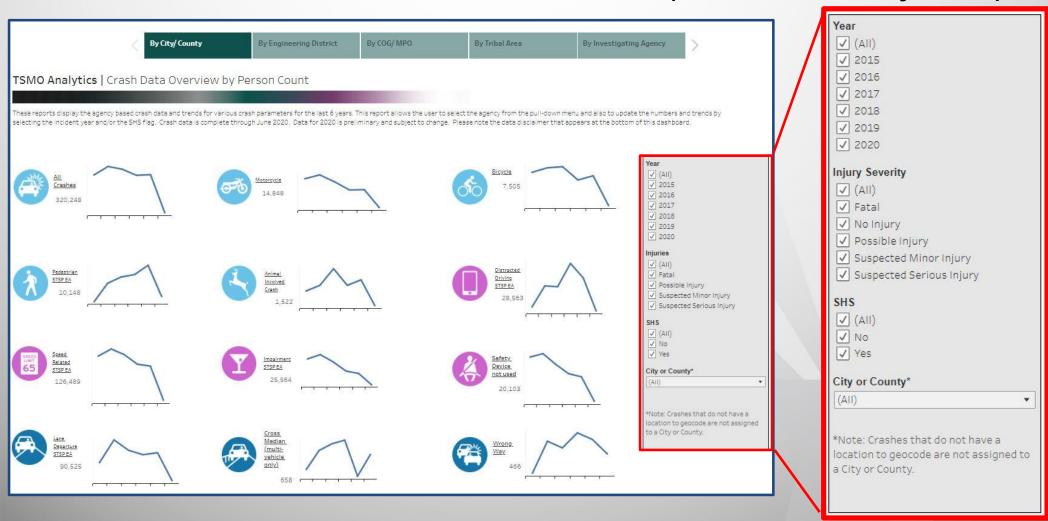
Crash Count Overview Incident Count (Number of Crashes)





Crash - Person Count

Crash Count Overview Person Count (Number of Injuries)



ADOT County Crash Data by ACIS flag

Separate Dashboard for Incident Count and Person Count

Incident Count	Person Count					
		his report displays the county and city based crash data and trends for years, severity, and SHS		elect an indiv		
County (All)			•	Flags	(AII)	

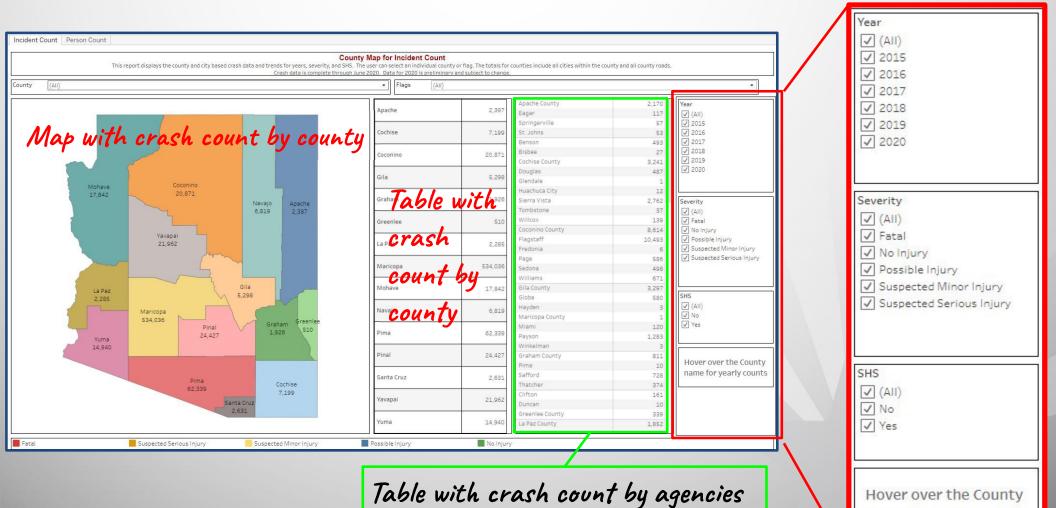
Data can be filtered by County from the pulldown menu

AND/ OR

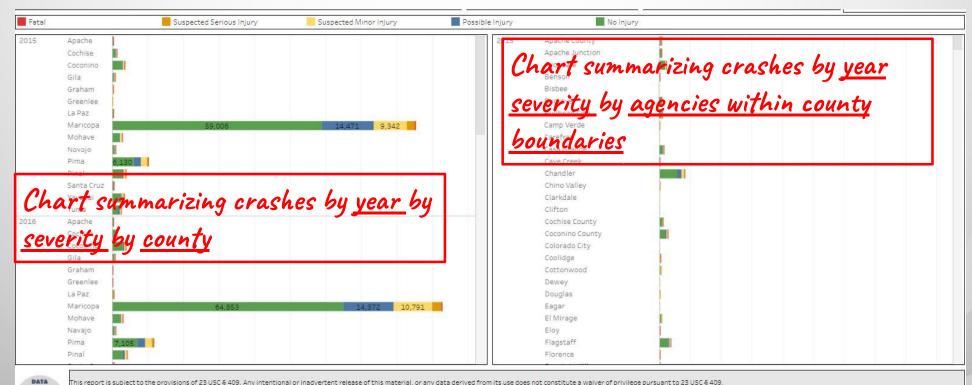
Data can be filtered by ACIS Flag from the pulldown menu

ADDT County Crash Data by ACIS flag ARIZONA DEPARTMENT OF TRANSPORTATION

name for yearly counts



within county boundary



This report is subject to the provisions of 23 USC § 409. Any intentional or inadvertent release of this material, or any data derived from its use does not constitute a waiver of privilege pursuant to 23 USC § 409.

DISCLAIMER

23 USC <u>§ 409 - Discovery and admission as evidence of certain reports and surveys</u>; Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

ADOT

Crash Count by Agency

City or County COG or MPO	ADOT Dist	rict Trib	al Lands	Function	al class	Investigat	ing Agency	/
This report displays the severity trends for years, months, hour, day of w			individual city, count			ss, or investigating a	gency by local roads,	Year (All) ▼
				Year				
Tribal Area	2015	2016	2017	2018	2019	2020	Grand Total	Severity
	114,231	124,173	124,863	124,656	127,147	93,549	708,619	(AII)
Ak-Chin Indian Community	4	9	3	7	5	5	33	
Cocopah Indian Tribe	5	1	2	5	7	7	27	Month
Colorado River Indian Tribes	20	16	18	10	18	16	98	(AII)
Fort McDowell Yavapai Nation	18	20	37	35	34	35	179	
Fort Mojave Indian Tribe	25	31	33	23	17	33	162	200. 1 1 1 1 1
Gila River Indian Community	742	1,035	1,001	1,136	950	804	5,668	Hour
Hohokam Pima N.M	6	13	10	21	14	6	70	(AII)
Hopi Tribe	16	20	14	21	18	17	106	
Hualapai Tribe	5	5	5	2	4	1	22	Weekday
Kaibab Band of Paiute Indians	5	3	3	3	5	1	20	(AII)
Navajo Nation	281	259	247	238	236	149	1,410	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Pascua Yaqui Tribe	2	1	1	4	2	2	12	SHS
Salt River Pima-Maricopa Indian Community	- , ,			, ,	^	,	6,398	(AII)
San Carlos Apache Tribe	lable s	ummari	zies Cra	shes by	Hgency	by [165	(All)
Tohono O'odham Nation				_	-	_	828	
Tohono O'odham Nation (San Xavier)	Year b	y Severi	ty by He	our by V	Veekday	by	941	Flags
Tribal Allotments				/	·	.)	80	(AII)
White Mtn Apache Indian Res.	15H5 6	y <u>ACIS</u>	Hag				544	
Yavapai-Apache Nation							10	
Yavapai-Prescott Indian Tribe	42	41	44	39	36	16	218	Note: Crashes that do not
Grand Total	117,121	127,345	127,858	127,746	130,067	95,473	725,610	have a location to geocode are not assigned to a

Incident_City | Person_City | Incident_District | Person_District | Incident_COG-MPO | Person_COG-MPO | Incident_Tribe | Person_Tribe | Incident_Agency | Person_Agency |

Separate Dashboard for Incident Count and Person Count by Agency

Crash Analysis for Agencies (Incident Count)

These reports display the agency based crash data summaries in graphs and charts for various parameters and also provide top locations by on-road for the selected agency. The user can also select by year, severity, SHS, LD, Ped, and other flag types.

Crash data is complete through June 2020. Data for 2020 is preliminary and subject to change.

Click here for PERSON COUNT dashboard

		Crash	es by Mo	onth and	l Year		
1				Year			
Month	2015	2016	2017	2018	2019	2020	Grand Total
Jan	10,059	10,564	10,907	11,049	10,834	10,713	64,126
Feb	9,208	10,476	10,521	10,743	10,810	10,292	62,050
Mar		11,435	11,956	11,446	11,422	8,376	65,196
Apr	9,683		10,446	10,638	11,087	4,932	57,421
May	9,267	10,271	10,510	10,296	10,301	6,705	57,350
Jun	8,494	9,072	9,181	9,256	9,124	7,028	52,155
Jul	8,530	9,255	9,064	9,009	9,399	7,171	52,428
Aug	9,351	10,979	11,155	10,634	11,397	7,573	61,089
Sep		10,850		10,640		8,169	60,983
Oct		11,215	11,660	11,799		8,914	66,124
Nov		11,274		11,287	11,546	7,945	63,515
Dec		11,319		10,949	11,466	7,655	63,173
Grand Total	117,121	127,345	127,858	127,746	130,067	95,473	725,610

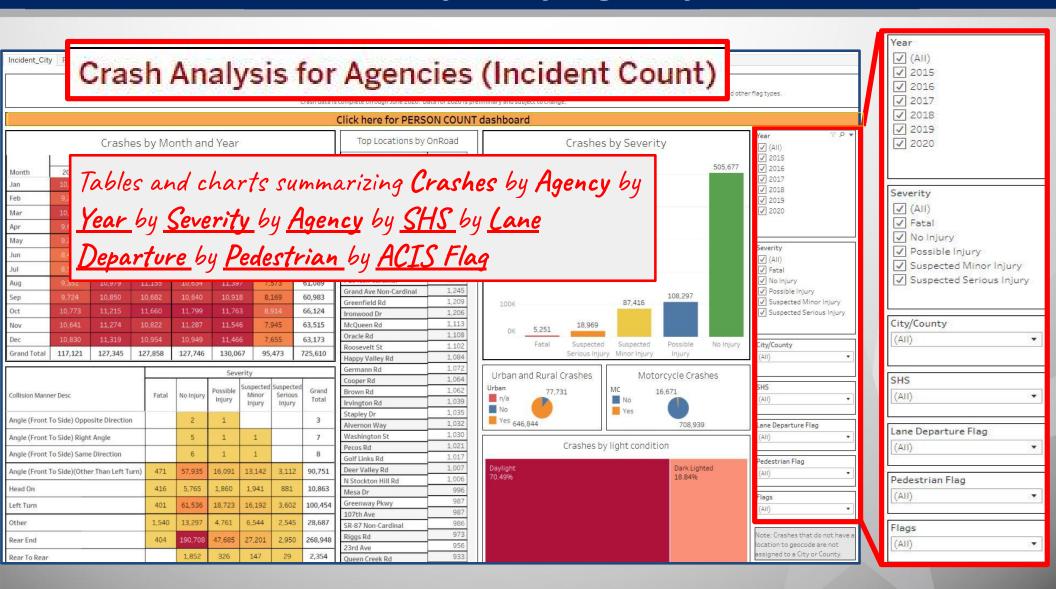
	Severity							
Collision Manner Desc	Fatal	No Injury	Possible Injury	Suspected Minor Injury	Suspected Serious Injury	Grand Total		
Angle (Front To Side) Opposite Direction		2	1			3		
Angle (Front To Side) Right Angle		5	1	1		7		
Angle (Front To Side) Same Direction		6	1	1		8		
Angle (Front To Side) (Other Than Left Turn)	471	57,935	16,091	13,142	3,112	90,751		
Head On	416	5,765	1,860	1,941	881	10,863		
Left Turn	401	61,536	18,723	16,192	3,602	100,454		
Other	1,540	13,297	4,761	6,544	2,545	28,687		
Rear End	404	190,708	47,685	27,201	2,950	268,948		
Rear To Rear		1,852	326	147	29	2,354		

Geocode On Road 🗧	
Campbell Ave	1,388
48th St	1,5/1
44th St	1,344
Frank Lloyd Wright Blvd	1,343
Lindsay Rd	1,326
Hunt Hwy	1,322
Main St	1,299
Ina Rd	1,297
McKellips Rd	1,284
1st Ave	1,279
I-19 Non-Cardinal	1,271
Grand Ave Non-Cardinal	1,245
Greenfield Rd	1,209
Ironwood Dr	1,206
McQueen Rd	1,113
Oracle Rd	1,108
Roosevelt St	1,102
Happy Valley Rd	1,084
Germann Rd	1,072
Cooper Rd	1,064
Brown Rd	1,062
Irvington Rd	1,039
Stapley Dr	1,035
Alvernon Way	1,032
Washington St	1,030
Pecos Rd	1,021
Golf Links Rd	1,017
Deer Valley Rd	1,007
N Stockton Hill Rd	1,006
Mesa Dr	996
Greenway Pkwy	987
107th Ave	987
SR-87 Non-Cardinal	986
Riggs Rd	973
23rd Ave	956
Queen Creek Rd	933

		Crashes	by Severit	У	505.577	Year ☑ (AII) ☑ 2015	7 0 ₹
500K					505,677	✓ 2016 ✓ 2017 ✓ 2018	
400K						✓ 2019 ✓ 2020	
Incident Count						Severity	
200K						✓ (All) ✓ Fatal ✓ No Injury ✓ Possible Injury	
100K	5.251	18,969	87,416	108,297		✓ Suspected Mino ✓ Suspected Serio	
OK	Fatal	Suspected Serious Injury	Suspected Minor Injury	Possible Injury	No Injury	City/County (All)	•
Jrban	and Rural C		MC 1	rcycle Cras	shes	SHS	
n/a No Yes 64	6,844		No Yes	708,93	9	(AII)	· · ·
		Crashes by	light conditi		-	(AII)	•
Daylight 70.49%				Dark Ligh 18.84%	nted	Pedestrian Flag (All)	•
						Flags (All)	•
						Note: Crashes that o location to geocode assigned to a City or	are not

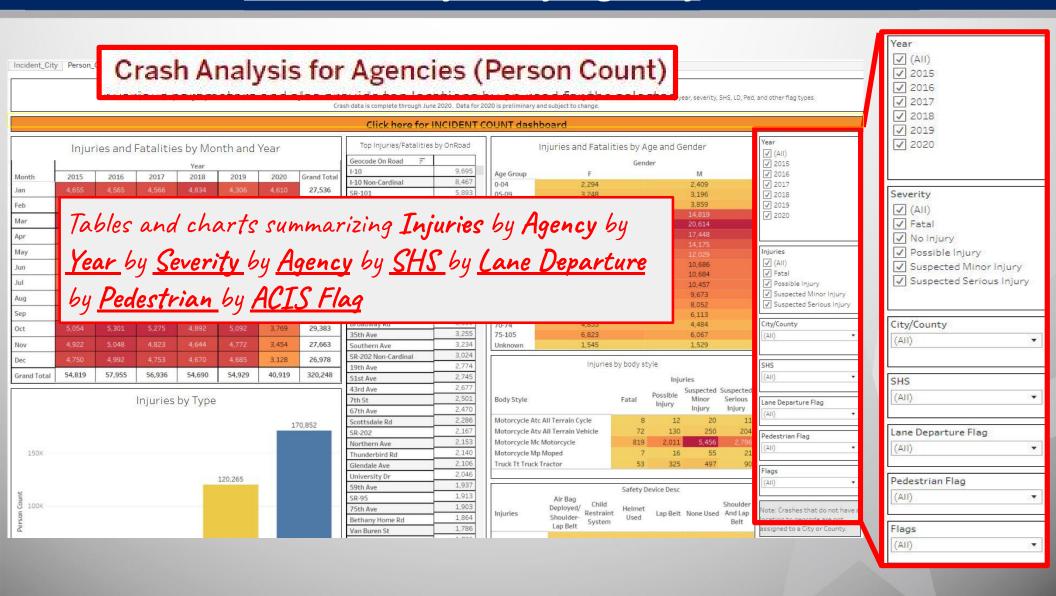
Crash Analysis by Agency

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Crash Analysis by Agency

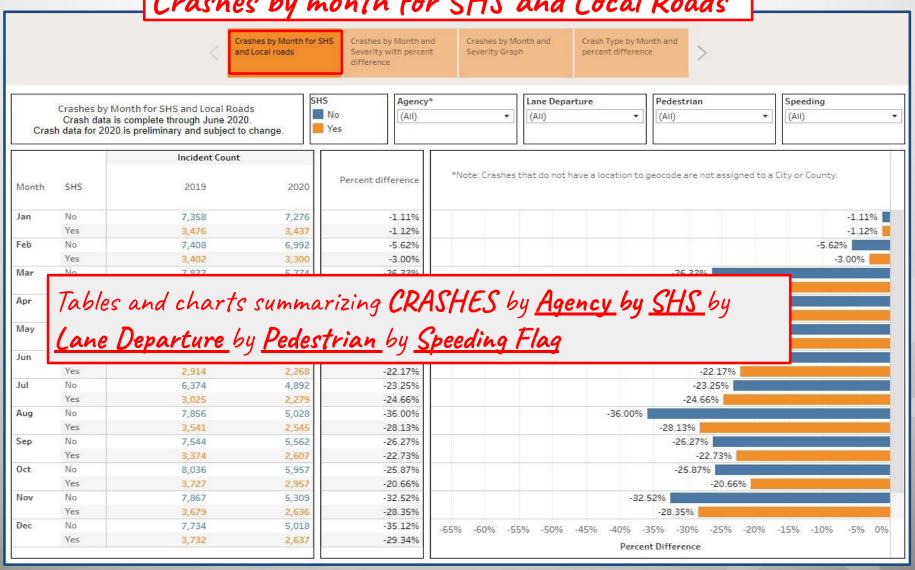
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Crashes by month for SHS and Local Roads

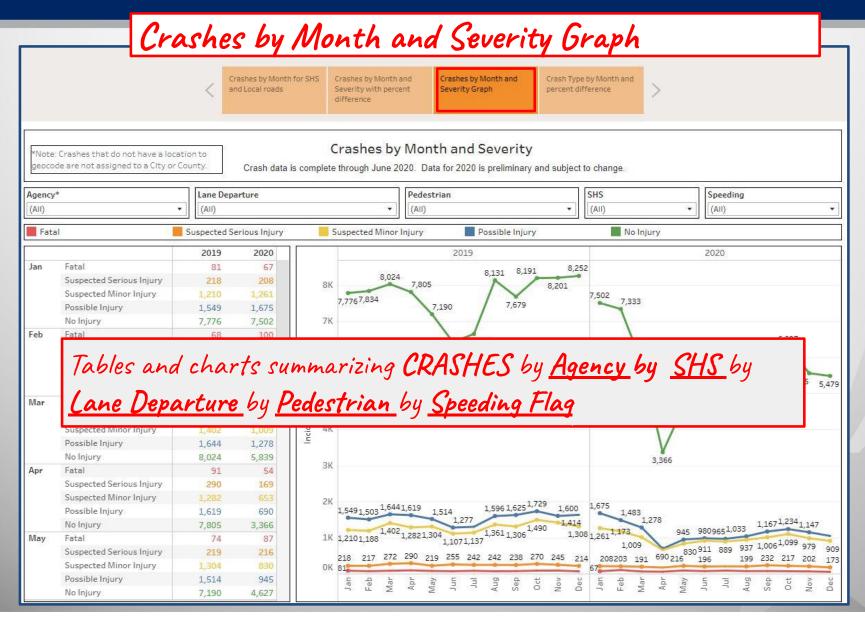




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Crashes by Month and Severity with % Difference Crashes by Month for SHS Crashes by Month and Crashes by Month and Crash Type by Month and and Local roads Severity with percent Severity Graph percent difference difference Crashes by Month and Severity and % difference - Crash data is complete through June 2020. Data for 2020 is preliminary and subject to change. Pedestrian SHS Agency* Lane Departure Speeding (AII) (AII) (AII) (All) (AII) Fatal Suspected Serious Injury Suspected Minor Injury Possible Injury No Injury 2019 2020 Percent difference *Note: Crashes that do not have a location to geocode are not assigned to a City or County. Jan Fatal 81 67 -17.3% -17.3% Suspected Serious Injury 218 -4.6% -4.6% 208 Suspected Minor Injury 4.2% 4.2% Possible Injury 1,549 1,675 8.1% 8.1% Feb 47.1% Tables and charts summarizing CRASHES by Agency by SHS by ane Departure by Pedestrian by Speeding Flag Mar Suspected Serious Injury -29.8% 191 -29.8% Suspected Minor Injury -28.0% -28.0% Possible Injury 1.644 1.278 -22.3% -22.3% No Injury 8.024 5.839 -27.2% -27.2% Apr 54 -40.7% 91 -40.7% Suspected Serious Injury 290 169 -41.7% -41.7% Suspected Minor Injury -49.1% -49.1% -57.4% Possible Injury 1,619 690 -57.4% No Injury 7,805 3,366 -56.9% -56.9% May 74 87 17.6% 17.6% 219 Suspected Serious Injury 216 -1.4% -60% -40% -20% 20% 40% 60% Suspected Minor Injury -36.3% Possible Injury 945 1,514 -37.6% Percent Difference

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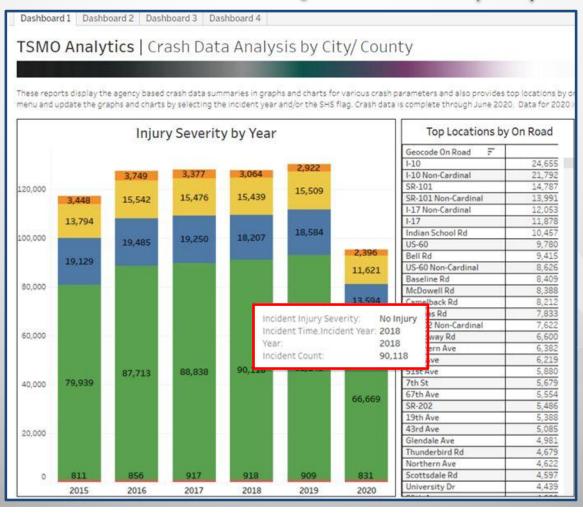


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Crashes by Crash Type by Month and % Difference Crashes by Month for SHS Crashes by Month and Crashes by Month and and Local roads Severity with percent Severity Graph percent difference difference *Note: Crashes that do not have Crash Type by Month and % difference - Crash data is complete through June 2020. Data for 2020 is preliminary and subject to change. a location to geocode are not assigned to a City or County. Agency Lane Departure Pedestrian SHS Speeding (AII) (AII) (All) (AII) (AII) 2019 2020 Percent difference Angle (Front To Side) (Other Than Left Turn) Jan 1.292 1.380 6.81% 6.81% Head On 167 169 1.20% 1.20% Left Turn 4.49% 1,558 1,628 4.49% Other 421 374 -11.16% -11.16% 4,124 4,104 -0.48% -0.48% Sideswipe Opposite Direction 163 110 -32.52% -32.52% Sideswipe Same Direction 1.92% 1,455 1,483 1.92% Single Vehicle 1,500 1.332 -11.20% -11.20% Tables and charts summarizing CRASHES by Agency by SHS by 8.33% 17.03% <u>Lane Departure by Pedestrian by Speeding Flag</u> 16.98% Single Vehicle 1.639 1.368 -16.53% -16.53% Mar Angle (Front To Side)(Other Than Left Turn) 1.420 1.087 -23.45% -23.45% Head On 204 131 -35.78% -35.78% Left Turn 1,740 1,205 -30.75% -30.75% Other 424 345 -18.63% -18.63% Rear End 4,139 2,700 -34.77% -34.77% Sideswipe Opposite Direction 160 133 -16.88% -16.88% Sideswipe Same Direction 1.158 -29.17% -29.17% 1.635 Single Vehicle 1,529 1.488 -2.68% -2.68% Angle (Front To Side) (Other Than Left Turn) Apr 1,354 722 -46.68% -80% -70% -60% -50% -40% -30% -20% -10% 10% 20% 30% Head On 153 90 -41.18% Percent Difference Left Turn 1,654 643 -61.12%

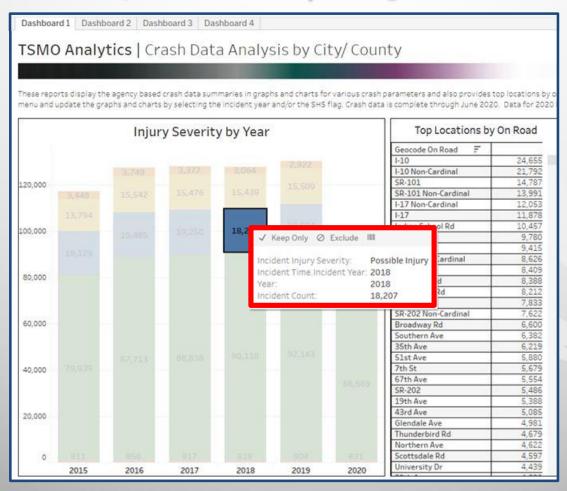


Hover on the chart and get the display with details





Left click to get the Keep only / Exclude Option





Left click to get the Keep only / Exclude Option





Left side bottom Options



Right side bottom Options

